Amendments to the Specification

Please amend paragraph [0005] as follows:

[0005] The system 80 allows the light 86 to proceed in a direct line from the light source 82 to the target 88, with the light 86 passing through the mask 84 substantially normally incident to the mask 84. Figs. 2 and 3 represent light from the source 82 in a two-dimensional frequency space, showing sine of an incident angle (relative to a direction normal to the mask 84) divided by numerical aperture, in both x- and y-directions. An ideal light source of infinitesimal extent would be a point at the origin. However, an actual source of some finite size involves some light that is at a non-zero angle of incidence (not exactly perpendicular). The shape of the light from the source may be a circle 90 centered about the origin (Fig. 2) or an annular shape 92 centered about the origin (Fig. 3).

Please amend paragraph [0006] as follows:

[0006] However, with decreasing feature sizes, resolution requirements have increased to the point that optical systems may no longer be able to achieve the required resolution, due to limits inherently related to the wavelengths of optical light employed in such systems. One possibility of increasing resolution beyond the limits inherent to optical photolithography systems is to utilize shorter-wave length radiation. One specific possibility has been that the use of extreme ultraviolet (EUV) radiation, having wave lengths in the range of about 30 to 700 Angstroms (3-70 nm). Use of EUV radiation allows the possibility of achieving better resolution than in optical photolithography systems. A schematic diagram of a typical EUV lithography system is shown in Fig. 4. ~~1.~~ The system 100 shown in Fig. 4 ~~1~~ generates an image onto a target 102, such as a semiconductor substrate coated with an appropriate resist, from a reflective mask or reticle 104. The transferred pattern may involve a pattern for

fabrication directly onto the semiconductor substrate, such as by doping or etching. Alternatively, the pattern may involve other semiconductor fabrication operations, such as fabrication of interconnects on a suitable pattern, for example, to suitably connect together semiconductor devices on the substrate.

Please split and amend paragraph [0032] as follows:

[0032] Turning now to Fig. 7, a portion of a lithography system 10 is shown. The lithography system 10 includes an asymmetric radiation source 12 that directs asymmetric radiation 14 to a reflective reticle 16. The term “asymmetric,” as used herein, refers to an asymmetric cross-section shape of radiation source, for example being wider in one dimension than in another direction. More particularly, the term “asymmetric” refers to non-axisymmetric cross-section shape in a plot of the angle of incidence of radiation (light) from the radiation source. The asymmetric radiation 14 has a non-axisymmetric cross-section shape, in contrast to the axisymmetric cross-section shapes shown in Fig. 2, 3, 5, and 6. Put another way, the asymmetric radiation source may provide a range of angles of incident that is larger in a first direction than in a second direction that is orthogonal to the first direction. Note that radiation with an asymmetric cross-section, as used herein, may have some degree of symmetry, such as left-right symmetry or top-bottom symmetry. The system 10 may also include one or more optical elements 20 that direct radiation 22 emerging from the reticle 16 to a target 24, such a resist-coated wafer.

[0032.1] Examples of phase diagrams for the asymmetric radiation 14 are shown in Figs. 8, 9A, and 9B. In all of ~~both~~ the phase diagrams the asymmetric radiation 14 has a greater range of angle incidence in a first direction (the y-direction) than in a second direction that is perpendicular to the first direction (the x-direction). The ratio of the overall range of the angle incidence may be greater than 1, and may be greater than 10 or even a large number. The ratio may be between 1 and about 2. For example, the

ratio ~~ration~~ may be between 1 and about 1.1, or may be between about 1.5 and 2.